

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Cottonwood Energy Company LP
AUTHORIZING THE OPERATION OF
Cottonwood Energy Project
Electric Services
LOCATED AT

Newton County, Texas

Latitude 30° 15' 36" Longitude 93° 44' 10"

Regulated Entity Number: RN100226109

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: O2338 Issuance Date: October 6, 2014

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
 - E. Emission units subject to 40 CFR Part 63, Subparts ZZZZ and DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapters C, § 113.1090 and § 113.1130 which incorporate the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required

under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the

observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following

periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity

requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
 - E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
 - F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
 - G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
 - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)
 - (iv) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (v) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

- A. When filling stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
 - (i) Title 30 TAC § 115.222(6) (relating to Control Requirements)
 - (ii) Title 30 TAC § 115.222(3), as it applies to liquid gasoline leaks
 - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

- 7. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

- B. The permit holder shall report, consistent with the averaging time identified in the “CAM Summary,” deviations as defined by the deviation limit in the “CAM Summary.” Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “CAM Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
12. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
- A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Boiler Standard Permit

Compliance Requirements

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
14. Use of Discrete Emission Credits to comply with the applicable requirements:

- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Protection of Stratospheric Ozone

- 15. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
 - B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Permit Location

16. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

17. A permit shield is granted for the emission units, groups, or processes specified in the attached “Permit Shield.” Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment “Permit Shield.” Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

18. For units STACK 1, STACK 2, STACK 3, and STACK 4 (identified in the Certificate of Representation as units CT-1, CT-2, CT-3, and CT-4), located at the affected source identified by ORIS/Facility code 55358, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.

- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.

- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

E. Excess emissions requirements for SO₂ and NO_x.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to

criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.

- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
 - (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
 - (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
 - (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
 - (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.

- (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Clean Air Interstate Rule Permit Requirements

19. For units STACK 1, STACK 2, STACK 3, and STACK 4 (identified in the Certificate of Representation as units CT-1, CT-2, CT-3, and CT-4), located at the site identified by ORIS/Facility code 55358, the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

A. General Requirements

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO_x source with the CAIR NO_x emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO₂ source with the CAIR SO₂ emissions limitation.

C. NO_x emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO_x unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (iv) CAIR NO_x allowances shall be held in, deducted from or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.

- (v) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO_x allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in this CAIR permit.

D. NO_x excess emissions requirement

- (i) If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, the owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO₂ emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, CAIR SO₂ allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO₂ unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar

year before the year for which the CAIR SO₂ allowance was allocated.

- (iv) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO₂ allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in this CAIR permit.

F. SO₂ excess emissions requirements

- (i) If a CAIR SO₂ source emits sulfur dioxides during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source and the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

- (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO_x designated representative for the source and each CAIR NO_x unit and the CAIR SO₂ designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or relied upon for compliance determinations.
 - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program.
 - (ii) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source and a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.
- H. The CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x source or CAIR SO₂ source or the CAIR designated representative of a CAIR NO_x source or

CAIR SO₂ source shall also apply to the owners and operators of such source and the units at the source.

- K. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x unit or CAIR SO₂ unit or the CAIR designated representative of a CAIR NO_x unit or CAIR SO₂ unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit or a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
AUXBOIL1A	Emission Points/Stationary Vents/Process Vents	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
AUXBOIL1A	Boilers/Steam Generators/Steam Generating Units	N/A	60Dc-01	40 CFR Part 60, Subpart Dc	No changing attributes.
AUXBOIL1A	Boilers/Steam Generators/Steam Generating Units	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
EMGEN	Emission Points/Stationary Vents/Process Vents	N/A	R1111-02	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EMGEN	SRIC Engines	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FWP	Emission Points/Stationary Vents/Process Vents	N/A	R1111-02	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FWP	SRIC Engines	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPCOOLTWR	Emission Points/Stationary Vents/Process Vents	COOL 1, COOL 2, COOL 3, COOL 4	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPCTLOV	Emission Points/Stationary Vents/Process Vents	CT1-LOV, CT2- LOV, CT3-LOV, CT4-LOV	R1111-02	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPHRSG	Boilers/Steam Generators/Steam Generating Units	HRSG1, HRSG2, HRSG3, HRSG4	60Da-01	40 CFR Part 60, Subpart Da	No changing attributes.
GRPSTACK	Emission Points/Stationary Vents/Process Vents	STACK 1, STACK 2, STACK 3, STACK 4	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPSTGLOV	Emission Points/Stationary Vents/Process Vents	STG1-LOV, STG2- LOV, STG3-LOV, STG4-LOV	R1111-02	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPTURB	Stationary Turbines	STACK 1, STACK 2, STACK 3, STACK 4	60GG-01	40 CFR Part 60, Subpart GG	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
AUXBOIL1A	EP	R1111-01	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
AUXBOIL1A	EU	60Dc-01	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
AUXBOIL1A	EU	60Dc-01	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
AUXBOIL1A	EU	60Dc-01	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
AUXBOIL1A	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					requirements of 40 CFR Part 63, Subpart DDDDD				
EMGEN	EP	R1111-02	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EMGEN	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart ZZZZ
FWP	EP	R1111-02	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
FWP	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602 The permit holder shall comply with the applicable limitation, standard and/or equipment specification	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart ZZZZ	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart ZZZZ

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					requirements of 40 CFR Part 63, Subpart ZZZZ				
GRPCOOLT WR	EP	R1111-01	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPCTLOV	EP	R1111-02	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPHRSG	EU	60Da-01	PM	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPHRSG	EU	60Da-01	PM (OPACITY)	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRPHRSG	EU	60Da-01	NOX	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRPHRSG	EU	60Da-01	SO2	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPSTACK	EP	R1111-01	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPSTGLOV	EP	R1111-02	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPTURB	EU	60GG-01	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
GRPTURB	EU	60GG-01	NOX	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3) ** See CAM Summary	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: GRPTURB	
Control Device ID No.: SCR	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-01
Pollutant: NOX	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen Oxides Concentration	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: Maximum NOx concentration not to exceed value calculated by §60.332(a)(1).	
CAM Text: Use a continuous emissions monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with NSR permit 43890/PSDTX965.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: AUXBOIL1A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: 15% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: EMGEN	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: 20% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. The source must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observation cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. Documentation of all observations shall be maintained. If visible emissions are observed, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: FWP	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: 20% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. The source must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observation cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. Documentation of all observations shall be maintained. If visible emissions are observed, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCOOLTWR	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: Opacity greater than 15% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. The source must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observation cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. Documentation of all observations shall be maintained. If visible emissions are observed, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCTLOV	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: 20% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. The source must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observation cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. Documentation of all observations shall be maintained. If visible emissions are observed, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPSTACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: 15% averaged over a six minute period.	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPSTGLOV	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: 20% averaged over a six-minute period.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. The source must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observation cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. Documentation of all observations shall be maintained. If visible emissions are observed, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
COAGAIID	N/A	30 TAC Chapter 115, Storage of VOCs	The site is not located in an affected county.
COAGAIID	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
DG-1	N/A	30 TAC Chapter 115, Degreasing Processes	The site is not located in an affected county.
EMGEN	N/A	40 CFR Part 60, Subpart IIII	Emergency generator compression ignition internal combustion engine was not constructed after July 11, 2005, not manufactured after April 1, 2006, and no modification or reconstruction after July 11, 2005.
EMGEN	N/A	40 CFR Part 60, Subpart JJJJ	Not a Spark Ignition Internal Combustion Engine.
FUELT1	N/A	30 TAC Chapter 115, Storage of VOCs	The site is not located in an affected county.
FUELT1	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
FUELT2	N/A	30 TAC Chapter 115, Storage of VOCs	The site is not located in an affected county.
FUELT2	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
FUGITIVES A	N/A	40 CFR Part 61, Subpart J	Fugitive piping components do not operate in benzene service as defined in 40 CFR 61.111.
FUGITIVES A	N/A	40 CFR Part 61, Subpart V	These sources do not operate in volatile hazardous air pollutant (VHAP) service.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
FUGITIVES A	N/A	40 CFR Part 63, Subpart H	Fugitive piping components do not operate in organic hazardous air pollutant service 300 hours or more during a calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63 that references 40 CFR Part 63, Subpart H.
FUGITIVES B	N/A	40 CFR Part 61, Subpart J	Fugitive piping components do not operate in benzene service as defined in 40 CFR 61.111.
FUGITIVES B	N/A	40 CFR Part 61, Subpart V	These sources do not operate in volatile hazardous air pollutant (VHAP) service.
FUGITIVES B	N/A	40 CFR Part 63, Subpart H	Fugitive piping components do not operate in organic hazardous air pollutant service 300 hours or more during a calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63 that references 40 CFR Part 63, Subpart H.
FWDTANK1	N/A	30 TAC Chapter 115, Storage of VOCs	The site is not located in an affected county.
FWDTANK1	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
FWP	N/A	40 CFR Part 60, Subpart IIII	Construction prior to July 11, 2005 where the stationary CI ICE was manufactured as a certified National Fire Protection Association (NFPA) fire pump engine prior to July 1, 2006.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
FWP	N/A	40 CFR Part 60, Subpart JJJJ	Not a Spark Ignition Internal Combustion Engine.
GASUNLOAD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Unloading operation is a motor vehicle fuel dispensing facility.
GRPCOOLTWR	COOL 1, COOL 2, COOL 3, COOL 4	40 CFR Part 63, Subpart Q	These cooling towers have never operated using chromium-based water treatment chemicals.
GRPTURB	STACK 1, STACK 2, STACK 3, STACK 4	40 CFR Part 60, Subpart KKKK	Stationary combustion turbines did not commence construction, modification or reconstruction after February 18, 2005.
GRPTURB	STACK 1, STACK 2, STACK 3, STACK 4	40 CFR Part 63, Subpart YYYY	Stationary combustion turbines commenced construction prior to January 14, 2003.
TANKEDG	N/A	30 TAC Chapter 115, Storage of VOCs	The site is not located in an affected county.
TANKEDG	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
VOCUNLOAD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	The site is not located in an affected county.

New Source Review Authorization References

New Source Review Authorization References 47

New Source Review Authorization References by Emission Unit.....48

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX965	Issuance Date: 04/07/2014
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 113225	Issuance Date: 10/18/2013
Authorization No.: 43890	Issuance Date: 04/07/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.372	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
AUXBOIL1A	NO. 1A AUXILIARY BOILER	113225
COAGAID	COAGULANT AID TANK	43890, PSDTX965
COOL 1	NO. 1 COOLING TOWER	43890, PSDTX965
COOL 2	NO. 2 COOLING TOWER	43890, PSDTX965
COOL 3	NO. 3 COOLING TOWER	43890, PSDTX965
COOL 4	NO. 4 COOLING TOWER	43890, PSDTX965
CT1-LOV	TURBINE 1 LUBE OIL VENT	43890, PSDTX965
CT2-LOV	TURBINE 2 LUBE OIL VENT	43890, PSDTX965
CT3-LOV	TURBINE 3 LUBE OIL VENT	43890, PSDTX965
CT4-LOV	TURBINE 4 LUBE OIL VENT	43890, PSDTX965
DG-1	DEGREASER	106.454/11/01/2001
EMGEN	EMERGENCY GENERATOR	43890, PSDTX965
FUELT1	NO. 1 FUEL TANK	106.412/09/04/2000
FUELT2	NO. 2 FUEL TANK	106.412/09/04/2000
FUGITIVES A	AMMONIA HANDLING	43890, PSDTX965
FUGITIVES B	NATURAL GAS HANDLING	43890, PSDTX965
FWDTANK1	FIREWATER DIESEL TANK	43890, PSDTX965
FWP	FIRE WATER PUMP	43890, PSDTX965

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
GASUNLOAD	GAS UNLOADING OPERATIONS	106.472/09/04/2000
HRSG1	NO. 1 DUCT BURNER	43890, PSDTX965
HRSG2	NO. 2 DUCT BURNER	43890, PSDTX965
HRSG3	NO. 3 DUCT BURNER	43890, PSDTX965
HRSG4	NO. 4 DUCT BURNER	43890, PSDTX965
STACK 1	NO. 1 COMBUSTION TURBINE STACK	43890, PSDTX965
STACK 1	NO.1 COMBUSTION TURBINE	43890, PSDTX965
STACK 2	NO. 2 COMBUSTION TURBINE	43890, PSDTX965
STACK 2	NO. 2 COMBUSTION TURBINE STACK	43890, PSDTX965
STACK 3	NO. 3 COMBUSTION TURBINE	43890, PSDTX965
STACK 3	NO. 3 COMBUSTION TURBINE STACK	43890, PSDTX965
STACK 4	NO. 4 COMBUSTION TURBINE	43890, PSDTX965
STACK 4	NO. 4 COMBUSTION TURBINE STACK	43890, PSDTX965
STG1-LOV	STEAM TURBINE 1 LUBE OIL VENT	43890, PSDTX965
STG2-LOV	STEAM TURBINE 2 LUBE OIL VENT	43890, PSDTX965
STG3-LOV	STEAM TURBINE 3 LUBE OIL VENT	43890, PSDTX965
STG4-LOV	STEAM TURBINE 4 LUBE OIL VENT	43890, PSDTX965
TANKEDG	EMERGENCY DIESEL TANK	43890, PSDTX965

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
VOCUNLOAD	VOC UNLOADING OPERATIONS	106.472/09/04/2000

Appendix A

Acronym List	52
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Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
ELP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
MRRT	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table..... 54

Major NSR Summary Table

Permit Number: 43890, PSD-TX-965			Issuance Date: 4/7/2014				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr (5)	TPY (4)			
Hourly Allowables (6) for each of four GE 7FA Turbines and Duct Burners Stack 1, Stack 2, Stack 3 and Stack 4	DLN and SCR, without HRSG Duct Burner Operation	NO _x	37.8	--	3, 14*, 15, 16	3, 14*, 15, 16, 25, 26	3, 14*, 15, 27
		CO	33.6	--	14*, 15, 16	14*, 15, 16, 25, 26	14*, 15, 27
		VOC	3.2	--	14*, 16	14*, 16, 25, 26	14*
		PM ₁₀	20.3	--	11**, 14**, 16	11**, 14**, 16, 25, 26	14**
		SO ₂	4.5	--	3, 9, 14*, 16, 18	14*, 16, 25, 26	14*
		NH ₃	19.6	--	14*, 19	14*, 25, 26	14*
		NO _x (10)	235.00	--	23	22, 23, 26	--
		CO (10)	2000.00	--	23	22, 23, 26	--
Hourly Allowables (6) for each of four GE 7FA Turbines and Duct Burners Stack 1, Stack 2, Stack 3 and Stack 4	DLN and SCR, Each with Natural Gas-Fired 610 MMBtu/hr HRSG Duct Burners in Operation	NO _x	48.5	--	3, 14*, 15, 16	3, 14*, 15, 16, 25, 26	3, 14*, 15, 27
		CO	99.0	--	14*, 15, 16	14*, 15, 16, 25, 26	14*, 15, 27
		VOC	16.4	--	14*, 16	14*, 16, 25, 26	14*
		PM ₁₀	27.1	--	3**, 11**, 14**, 16	3**, 11**, 14**, 16, 25, 26	3**, 14**
		SO ₂	6.0	--	3, 9, 14*, 16, 18	3, 14*, 16, 25, 26	3, 14*
		NH ₃	25.8	--	14*, 19	14*, 25, 26	14*
		NO _x (10)	235.00	--	23	22, 23, 26	--
		CO (10)	2000.00	--	23	22, 23, 26	--
Annual Allowables (6) for each of four GE 7FA Turbines and Duct Burners Stack 1, Stack 2, Stack 3 and Stack 4	DLN and SCR Technology, with Natural Gas-Fired 610 MMBtu/hr HRSG	NO _x (8)	--	166.5	3, 14*, 15, 16	3, 14*, 15, 16, 25, 26	3, 14*, 15, 27
		CO (8)	--	296.8	14*, 15, 16	14*, 15, 16, 25, 26	14*, 15, 27
		VOC (8)	--	45.6	14*, 16	14*, 16, 25, 26	14*
		PM ₁₀ (8)	--	105.4	3**, 11**, 14**, 16	3**, 11**, 14**, 16, 25, 26	3**, 14**
		SO ₂ (8)	--	22.1	3, 9, 14*, 16, 18	3, 14*, 16, 25, 26	3, 14*
		NH ₃	--	95.8	14*, 19	14*, 25, 26	14*
COOL1	Cooling Tower 1	PM ₁₀	2.55	4.45	11**, 12	11**, 12, 26	12
COOL2	Cooling Tower 2	PM ₁₀	2.55	4.45	11**, 12	11**, 12, 26	12
COOL3	Cooling Tower 3	PM ₁₀	2.55	4.45	11**, 12	11**, 12, 26	12
COOL4	Cooling Tower 4	PM ₁₀	2.55	4.45	11**, 12	11**, 12, 26	12
AUXBOIL	Auxiliary Boiler	NO _x	6.98	15.69	--	26	--
		CO	6.51	14.65	--	26	--
		VOC	0.70	1.57	--	26	--
		PM ₁₀	0.49	1.11	11**	3**, 11**, 26	3**
		SO ₂	0.22	0.50	--	3, 26	3
FWDTANK1	Fire Water Diesel Tank	VOC	0.02	0.01	--	--	--
COAGRID	Coagulant Aid Tank	VOC	0.12	0.01	--	--	--
TANKEDG	Emergency Diesel Tank	VOC	0.07	0.01	--	--	--

Major NSR Summary Table

Permit Number: 43890, PSD-TX-965					Issuance Date: 4/7/2014		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr (5)	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
FWP	Fire Water Pump	NO _x	10.39	2.60	--	26	--
		CO	2.24	0.56	--	26	--
		VOC	0.84	0.21	--	26	--
		PM ₁₀	0.74	0.18	11**	11**, 26	--
		SO ₂	0.69	0.17	9	26	--
EMGEN	Emergency Diesel Engine Generator	NO _x	12.40	3.10	--	26	--
		CO	2.67	0.67	--	26	--
		VOC	1.01	0.25	--	26	--
		PM ₁₀	0.88	0.22	11**	11**, 26	--
		SO ₂	0.82	0.21	--	26	--
Fugitives A	Ammonia Handling	NH ₃	0.21	0.90	--	--	--
Fugitives B	Natural Gas Handling	VOC	0.23	1.02	--	--	--
MSSFUG	Miscellaneous Maintenance Activities	NO _x	<0.01	<0.01	--	22	--
		CO	<0.01	<0.01	--	22	--
		PM	1.04	0.39	--	22	--
		PM ₁₀	1.04	0.39	--	22	--
		PM _{2.5}	1.04	0.39	--	22	--
		VOC	5.59	2.23	--	22, 23, 26	--
		NH ₃	4.52	<0.01	--	22	--
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below.							
71264	Oil Demister	VOC	0.0105	0.046	--	--	--

Notes:

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3)

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented

PM_{2.5} - total particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

NH₃ - ammonia

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Except for planned MSS activities, the concentration limits for the gas turbines listed in the permit condition apply and may be a more stringent requirement than the mass emission rate limits listed in this table.

(6) These emissions are permitted under PSD.

(7) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, during any clock

hour that includes one or more minutes of planned MSS activities, the pollutant's hourly emission limits that apply during planned MSS activities shall apply during that clock hour.

(8) The tpy emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.

(9) Unless otherwise stated, the lb/hr emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.

(10) This short term emission rate applies during planned MSS activities.

** Performance test performed and reported at time of permit initial issuance.

** Opacity is used as an indicator of PM emissions, but the opacity limits in the permit are not directly correlated to the PM limit in the MAERT; therefore, non-compliance with the opacity limit does not constitute non-compliance with the PM limit.



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT**



A Permit Is Hereby Issued To
Cottonwood Energy Company LP
Authorizing the Construction and Operation of
Electric Power Generation Facility
Located at Deweyville, Newton County, Texas

Latitude 30° 15' 36" Longitude 93° 44' 10"

Permits: 43890 and PSDTX965

Revision Date : April 7, 2014

Renewal Date: May 5, 2021

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

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1. This permit covers only those sources of emissions listed in the attached table entitled “Emission Sources - Maximum Allowable Emission Rates,” and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits and operating schedules is based on a rolling 12-month period (i.e., updated monthly) rather than the calendar year. **(08/12)**

This permit authorizes the emissions from the planned maintenance, startup, and shutdown (MSS) activities listed in Attachment A, Attachment B, or the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned maintenance activities that are non-ILE planned maintenance activities that this permit authorizes to be performed. **(08/12)**

It does not include MSS activities associated with the following facilities at the site as these MSS activities are authorized under Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106) or are authorized as a De Minimis source by 30 TAC 116.119. This list is not intended to be all inclusive and can be altered at the site without modifications to this permit. **(08/12)**

Facility	Authorization
Natural Gas-Fired Comfort Heating System	30 TAC § 106.102
Bench Scale Laboratory Equipment	30 TAC § 106.122
Welding, Soldering, and Brazing	30 TAC § 106.227
Routine Facility Maintenance Including Painting and Abrasive Blasting	30 TAC § 106.263
Buffing, Polishing, Cutting, Drilling, Sawing, Machining, and Grinding	30 TAC § 106.265
Cooling Water Units	30 TAC § 106.371
Industrial Gases	30 TAC § 106.372
Refrigeration System Maintenance and Repair	30 TAC § 106.373
Equipment Fueling	30 TAC § 106.412
Remote Reservoir and Cold Solvent Cleaners	30 TAC § 106.454

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Facility	Authorization
Diesel Fuel Storage Tanks, Gasoline Storage Tanks, Water Treatment Chemical Storage Tanks, Lube Oil Storage Tanks and Loading and Unloading	30 TAC § 106.472, 30 TAC § 106.473
Emergency Diesel Electric Generators, Fire Water Pumps and Portable Engines	30 TAC § 106.511
Water and Waste Water Treatment	30 TAC § 106.532

Source or Activity	Authorization
Glove Box Abrasive Blasting	30 TAC 116.119(a)(1)
Office Cleaning Activities	30 TAC 116.119(a)(1)
Grounds Maintenance and Landscaping	30 TAC 116.119(a)(1)
Pesticide and Insecticide Use and Fumigation	30 TAC 116.119(a)(1)
Application of Lubricants Without Aerosol Propellants	30 TAC 116.119(a)(1)
Wet Abrasive Blast Cleaning	30 TAC 116.119(a)(1)
Aerosol Product Use – Less Than 4 Cans/64 oz/day	30 TAC 116.119(a)(1)
Aerosol Can Puncturing, Recycling and Disposal	30 TAC 116.119(a)(1)
Aqueous Cleaning Solutions	30 TAC 116.119(a)(1)
Manual Application of Cleaning or Stripping Solutions or Coatings	30 TAC 116.119(a)(1)

2. A copy of this permit shall be kept at the plant site and made immediately available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ), EPA, or any local air pollution control agency having jurisdiction. Excluding fugitive emission sources, the holder of this permit shall clearly label all equipment at the property that has the potential of emitting air contaminants. Permitted emission points shall be clearly labeled corresponding to the emission point numbering on the maximum allowable emission rates table. **(08/12)**

Federal Applicability

3. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources (NSPS), Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart A, General Provisions and the following:
 - A. Duct Burners - Subpart Da, Electric Utility Steam Generating Units
 - B. Gas Turbines - Subpart GG, Stationary Gas Turbines
 - C. Auxiliary Boiler - Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Emission Standards, Operating Specifications and Fuel Specifications

4. Each of the four General Electric 7FA combustion turbine generator (CTG) units authorized by this permit have a nominal output rating of 190 megawatts electric (MWe). None of the four CTGs will be equipped for steam injection.
5. Each of the four heat recovery steam generator (HRSG) duct burner systems is limited to a maximum heat input of 610 Million British thermal units per hour based on the higher heating value of natural gas. The four duct burner systems are also limited to a cumulative natural gas throughput of 11,731 Million standard cubic feet (MMscf) per year. **(08/12)**

Operation of the auxiliary boiler is limited to 4,500 hours per year and may only be operated for combustion turbine startup and for periodic maintenance and reliability. For combustion turbine startup, the auxiliary boiler may only be operated when all four combustion turbines are off-line, except for a two-hour window in which both the auxiliary boiler and the first combustion turbine to come back on-line may operate concurrently to allow the combustion turbine to reach base load. **(08/12)**

6. Each CTG shall normally operate at 60 to 100 percent load except for periods of start-up or shutdown. Reduced load operation is authorized to accommodate periods of reduced demands provided the maximum pounds per hour (lbs/hr)

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emission rates specified in the attached table entitled "Emission Sources - Maximum Allowable Emissions Rates" (MAERT) for Emission Point Nos. (EPNs) Stacks 1, 2, 3, and 4 are not exceeded.

7. Fuel for CTGs and HRSG duct burners is limited to pipeline-quality natural gas containing no more than 0.8 grain total sulfur per 100 dry standard cubic feet (dscf) on a short-term basis and 0.5 grain total sulfur per 100 dscf on a rolling 12-month average basis. The CTGs and HRSG duct burners will not be capable of firing fuel oil.
8. The emergency diesel engine-generator set and firewater pump diesel engine are authorized to fire distillate fuel oil containing not more than 0.3 weight percent sulfur and are each limited to a maximum of 500 non-emergency hours of operation annually.
9. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels fired in the gas turbines, duct burners, and firewater pump engine or shall allow air pollution control agency representatives to obtain a sample for analysis.
10. Combined CTG and HRSG Duct Burner Emission Limits with Selective Catalytic Reduction (SCR) (Based on a One-Hour Average)
 - A. Emissions of NO_x shall not exceed 5 parts per million by volume dry basis (ppmvd) when corrected to 15 percent oxygen (O₂) when firing natural gas, with or without the evaporative coolers and/or duct burners operating. This concentration limit may be exceeded during periods of reduced load as long as the hourly emission limits in the MAERT are not exceeded.
 - B. Emissions of CO shall not exceed 9 ppmvd when corrected to 15 percent O₂, at full load, and 17.6 ppmvd when corrected to 15 percent O₂ with duct burners firing. This concentration limit may be exceeded during periods of reduced load if the hourly limit in the MAERT is not exceeded.
 - C. Emissions of volatile organic compounds (VOC) calculated as propane, defined as total hydrocarbons minus methane and ethane, shall not exceed 0.51 ppmvd when corrected to 15 percent O₂, at full load, and 1.9 ppmvd when corrected to 15 percent O₂ during operation of the duct burners. Compliance with the VOC emission limits shall be demonstrated during any stack sampling described in Special Condition No. 14.

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- D. The limits in Special Condition No. 10 shall apply except during periods of planned MSS. **(08/12)**
 - E. Emissions of ammonia (NH_3) shall not exceed 7 ppmvd on a rolling 3-hour average when corrected to 15 percent O_2 at any operating load.
 - F. The aqueous NH_3 storage tanks and NH_3 handling system, which are part of the SCR system required by this permit, are authorized pieces of equipment.
11. The opacity shall not exceed 5 percent averaged over a six-minute period from each stack. During MSS activities, the opacity shall not exceed 20 percent. Each determination shall be made by first observing for visible emissions while each facility is in operation. There is no requirement to conduct an observation during MSS activities. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If the opacity exceeds 5 percent during normal operations or 20 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. **(08/12)**

Cooling Tower Operating Specifications

12. The Cooling Towers (EPNs COOL1, COOL2, COOL3 and COOL4) shall not exceed a total dissolved solids (TDS) concentration of 3,000 parts per million by weight (ppmw).
- A. The holder of this permit shall perform sampling to establish the conductivity to TDS conversion factor that shall be used by the permit holder to demonstrate compliance in accordance with this special condition. A cooling water sample shall be collected in each of the three calendar months following the start of commercial operation of the turbine and a conductivity and TDS analysis performed for each of the three samples in order to establish the actual cooling water conductivity to TDS conversion factor. The conductivity and TDS analyses shall be performed in accordance with "Standard Methods for the Examination of Water and Wastewater" Method 2510 (Conductivity) and Method 2540 (Solids). An average conversion factor and standard

deviation based on the three values shall be determined from the cooling water sample results.

- B. Within 30 days after completion of the sampling, copies of the sampling report shall be submitted to the TCEQ Beaumont Regional Office.
- C. Continuous compliance with the hourly and annual particulate matter emission rates for the Cooling Towers in the MAERT shall be demonstrated by the holder of this permit by monitoring the conductivity of the cooling water at a monitoring point in the recirculating water of each cooling tower, and recording these conductivity readings on a no less than weekly basis. Each conductivity measurement shall be converted to TDS concentration in ppmw using the conductivity to TDS conversion factor established in accordance with Special Condition No. 12.

Initial Determination of Compliance

- 13. Sampling ports and platforms shall be incorporated into the design of exhaust stacks (except for auxiliary boiler and emergency equipment) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
- 14. Upon request of the TCEQ Beaumont Regional office the holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs Stacks 1, 2, 3, and 4. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with EPA Reference Methods 201A and 202 or Reference Method 5 modified to include back half condensibles, for the concentration of PM₁₀; Reference Method 8 or Reference Methods 6 or 6c for sulfur dioxide (SO₂); Reference Method 9 for opacity; Reference Method 10 for the concentration of CO; Reference Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane); Reference Method 20 for the concentrations of NO_x and O₂; and EPA Conditional Test Method 27 for NH₃ or by other equivalent methods approved by the TCEQ Beaumont Regional Director. **(08/12)**

Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for SO₂. If fuel sampling is used, compliance with NSPS Subpart GG, SO₂ limits shall be based on 100 percent conversion of the

sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or a designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ Beaumont Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Permitting and Registration, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Air Permits Division in Austin.

- B. Air emissions from each CTG shall be tested while firing at full load for the ambient conditions at the time of testing. Air contaminants to be sampled and analyzed while at full load include (but are not limited to) NO_x, O₂, CO, NH₃, VOC, SO₂, PM₁₀, and opacity. (Fuel sampling using the methods and procedures of 40 CFR § 60.335[d] may be conducted in lieu of stack sampling for SO₂.)

The CTGs evaporative coolers shall be operating during sampling if their operation is necessary to achieve the maximum load on the turbines.

- C. Air contaminants to be sampled and analyzed while at the minimum point in the load range include (but are not limited to) VOC. The operating range has been represented in the permit application to be between 60 percent and 100 percent of full load but should be established during the pretest meeting and reported in the sampling report.
- D. Sampling of each CTG shall occur within 60 days after achieving the maximum fuel firing rate at which the turbine will be operated but no later than 180 days after initial start-up of each unit. Requests for an extension of this schedule shall be made in writing to and approved by the Director of the TCEQ Beaumont Regional Office. Additional sampling shall occur as may be required by the TCEQ or EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, copies of the sampling reports shall be distributed as follows:

One copy to the TCEQ Beaumont Regional Office.
One copy to the TCEQ Austin Office of Air, Air Permits Division, Austin.
One copy to the EPA Region 6 Office, Dallas.
- F. Initial sampling of the turbines has been completed and the date was verified prior to the amendment of this permit. **(08/12)**

Continuous Determination of Compliance for NO_x and CO

- 15. The holder of this permit shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of NO_x, CO, and O₂ from each Combined Cycle Unit Stack (EPNs Stacks 1, 2, 3, and 4).
 - A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division in Austin for requirements to be met.
 - B. The holder of this permit shall assure that the CEMS meets the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, § 5.2.3 and any CEMS downtime shall be reported to the

appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

- C. The monitoring data shall be reduced to hourly average concentrations at least once every hour using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emissions rate in lbs/hr at least once every hour. Pound per hour data from EPNs Stacks 1, 2, 3, and 4 shall be summed monthly to tons per year and used to determine compliance with the annual emissions limits of this permit.
 - D. All monitoring data and quality-assurance data shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or their designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
 - E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required Relative Accuracy Test Audits in order to provide them the opportunity to observe the testing.
 - F. If applicable, each CEMS will be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A. The demonstration of ongoing compliance will be met using those procedures described in 40 CFR Part 75, Appendix B. Title 40 CFR Part 75 is deemed an acceptable alternative to the performance specifications and quality-assurance requirements of 40 CFR Part 60.
16. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the hourly natural gas consumption of each gas turbine and each HRSG. The systems shall be accurate to ± 5.0 percent of the unit's maximum flow.
17. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after it was first detected by any employee at the facility, unless written permission is obtained from the TCEQ Beaumont Regional Office which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.

18. The holder of this permit shall monitor the sulfur content of the permitted fuels pursuant to 40 CFR Part 60, Subpart GG. **(04/14)**

Continuous Determination of Compliance for NH₃

19. Following the initial demonstration of compliance for NH₃ emission rates (under Special Condition No. 14) or within 90 days of initial start-up, whichever occurs first, the NH₃ concentration in each Stack (EPNs Stacks 1, 2, 3, and 4) shall be tested or calculated according to the following method and frequency:

The concentration will be measured using a sorbent or stain tube device designed for measurement in the 5 to 10 parts per million (ppm) range. Stain tubes must be stored, maintained, used, and replenished in accordance with manufacturer recommendations. Ammonia measurements shall be taken each day a SCR unit is operated for more than one hour (an "operating day") for 15 consecutive operating days. If, during this 15 operating day period the measured concentrations are less than 7 parts per million by volume (ppmv) (Special Condition No. 10E), then the frequency may be reduced to testing once every two weeks. Sorbent or stain tube testing each operating day (for 15 consecutive operating days) shall continue or resume after the initial 15 operating day testing whenever concentrations in excess of 7 ppmv are measured. Any other method of measuring NH₃ emissions shall require prior written approval from the TCEQ Office of Air, Air Permits Division in Austin.

Planned Maintenance Startup and Shutdown

20. The holder of this permit shall minimize emissions during planned maintenance, start-up and shutdown (MSS) activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility. **(08/12)**
21. Emissions during planned startup and shutdown activities will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows: **(08/12)**
 - A. A planned startup of the EGFs with EPN Nos. Stack1, Stack 2, Stack 3 and Stack 4 is defined as the period that begins with the ignition of fuel in the combustion system as detected using a flame scanner and ends when the turbine transfers from Mode 6 to Normal Mode. A planned startup for that EGF is limited to 240 minutes. **(08/12)**

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- B. A planned shutdown of the EGFs with EPN Nos. Stack1, Stack 2, Stack 3 and Stack 4 is defined as the period that begins when the turbine transfers from Normal mode and ends when fuel is no longer in the combustion system as detected using a flame scanner. A planned shutdown for the EGFs is limited to 60 minutes. **(08/12)**
22. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit may be demonstrated as follows. **(08/12)**
- A. For each pollutant emitted during ILE planned maintenance activities, the permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application. **(08/12)**
 - B. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 23A, the permit holder shall do the following for each calendar month. **(08/12)**
 - (1) Compare the pollutant's short-term (hourly) emissions during planned maintenance activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT. **(08/12)**
 - C. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 23A, the permit holder shall do the following for each calendar month. **(08/12)**
 - (1) Determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 23B. **(08/12)**
 - D. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions do not occur through a stack, the permit holder shall do the following for each calendar month. **(08/12)**
 - (1) Determine the total emissions of the pollutant from such non-ILE planned maintenance activities in accordance with Special Condition No. 23B. **(08/12)**

- (2) Once monthly emissions have been determined in accordance with Special Condition No. 22 D(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the sum of the rolling 12-month emissions for the pollutant and the annual potential to emit for the pollutant from all ILE-planned MSS activities (as referenced in Special Condition No. 22A) to the annual emissions limit for the pollutant in the MAERT. **(08/12)**
- 23. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition Nos. 22 B, C and D as follows: **(08/12)**
 - A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
 - B. For each pollutant not described in Special Condition No. 23A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1 through 4 below, provided that the permit holder maintains appropriate records supporting such determination: **(08/12)**
 - (1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations. **(08/12)**
 - (2) Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content. **(08/12)**
 - (3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the

facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content. **(08/12)**

- (4) Use of parametric monitoring system (PEMS) data applicable to the facility. **(08/12)**
24. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions. **(08/12)**

Recordkeeping Requirements

25. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
- A. A copy of this permit.
 - B. Permit application submitted March 20, 2000 and subsequent representations submitted to the TCEQ.
 - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 14 to demonstrate initial compliance.
 - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
26. The following information shall be maintained at the plant by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction.
- A. The CEMS data of NO_x, CO, and O₂ emissions from EPNs Stacks 1, 2, 3, and 4 to demonstrate compliance with the emission rates listed in the MAERT.
 - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems in a permanent form suitable for inspection.

- C. Records of the hours of operation and natural gas fired in each CTG and each HRSG, pursuant to Special Conditions No. 5 and 16.
- D. Records of the NH₃ measurements made pursuant to Special Condition No. 19.
- E. Records of the hours of operation of the auxiliary boiler, fire water pump, and diesel engine-generator set and records of fuel usage for these units on an annual basis.
- F. The SCR catalyst unit maintenance records specifying frequency of NH₃ monitoring and dates of catalyst replacement.
- G. Records of the location of the monitoring point for the cooling tower recirculating water and date and time of monitoring and weekly measured TDS in parts per million in the recirculating water of the cooling tower.
(08/12)
- H. Records of visible emission/opacity observations as specified in Special Condition No. 11.
- I. Startup/Shutdown records shall include the following: **(08/12)**
 - (1) Type and quantity of fuel used; and
 - (2) Emissions from the event; and
 - (3) Date, time and duration of the event.
- J. Pursuant to Special Condition No. 22A, the annual confirmation shall be kept with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions in accordance with the original manner as represented in the permit amendment application dated January 4, 2011. **(08/12)**
- K. Monthly maintenance records pursuant to Special Condition No. 23B shall include the following: **(08/12)**
 - (1) Type of activity;
 - (2) Emissions from the activity; and

- (3) Date, time, and duration of the activity.

Reporting

27. The holder of this permit shall submit to the TCEQ Beaumont Regional Office and the Air Enforcement Branch of EPA in Dallas semiannual reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. **(04/14)**

Prevention of Significant Deterioration (PSD)/National Ambient Air Quality Standards (NAAQS)

28. This PSD permit action is based on the evaluation of the emissions and other information as represented in the permit application submitted on March 20, 2000, and subsequent submittals in response to requests for information, and the determination that the emissions of nitrogen oxide (NO_x), particulate matter less than 10 microns in size (PM₁₀), and carbon monoxide (CO) will not cause or contribute to any exceedance of applicable PSD Increment or NAAQS for these air contaminants. In addition, this permit action is based on a determination that both NO_x and CO predicted impacts are less than the applicable significance levels (that is, less than NO_x annual average significance level of one µg/m³, and less than CO one and eight-hour average significance levels of 2,000 and 500 µg/m³, respectively).

Dated April 7, 2014

Attachment A
 Permit Numbers 43890 and PSDTX965
 Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activities	Emissions						
	NO _x	CO	VOC	PM	SO ₂ / H ₂ S	NH ₃ / Urea	Exempt Solvent
Water-based washing			X				X
Miscellaneous particulate filter maintenance ¹				X			
Management of sludge from pits, ponds, sumps, and water conveyances ²			X				
Organic chemical usage			X	X			X
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instruments including sight glasses, meters, gauges, CEMS, and PEMS.	X	X	X				
Turbine washing – unit online ³				X			
Small equipment and fugitive component repair/replacement in VOC and ammonia service ⁴			X			X	
Gaseous Fuel Venting - Lines < 100 feet long ⁵			X				
Degassing for maintenance of storage vessels storing ammonia or other material with vapor pressure >0.5 psia that does not require clearing of the vessels to allow for entry of personnel						X	
Catalyst handling and maintenance ⁶				X			

Notes:

1. Includes, but is not limited to, baghouse filters, process-related building air filters, and combustion turbine air intake filters.
2. Includes, but is not limited to, management by vacuum truck/dewatering of materials in open pits and ponds, and sumps, tanks and other closed or open vessels. Materials managed include water and sludge mixtures containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.
3. Involves use of water only
4. Includes, but is not limited to, (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in natural gas, fuel oil, diesel oil, ammonia, lube oil, and gasoline service, (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service, and (iii) off-line NOx control device maintenance (including maintenance of the anhydrous ammonia systems and aqueous ammonia systems associated with SCR systems and SNCR systems)
5. Includes, but is not limited to, venting prior to startup, lockout-tagout maintenance, pipeline pigging, and meter proving.
6. Includes, but is not limited to, replacement, cleaning, activation, and deactivation of SCR and oxidation catalysts.

Dated August 20, 2012

Attachment B
 Permit Numbers 43890 and PSDTX965
 Non-Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activities	EPN	Emissions						
		NO _x	CO	VOC	PM	SO ₂ /H ₂ S	NH ₃ /Urea	Exempt Solvent
Combustion Optimization ^{1, 2}	Stack 1 Stack 2 Stack 3 Stack 4	X	X	X	X	X	X	
Gaseous Fuel venting – Lines >100 feet long ³	MSSFUG			X				

Notes:

1. Includes, but is not limited to, (i) leak and operability checks (e.g., turbine over-speed tests, troubleshooting), (ii) balancing, and (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.
2. Emissions associated with this activity are no higher than the maximum hourly emission rate occurring during startup or shutdown. Hourly emissions from these activities will be subject to the hourly emission limits for MSS activities from gas turbines listed on the MAERT.
3. Includes, but is not limited to, venting prior to pipeline pigging, and meter proving.

Dated August 20, 2012

Emission Sources - Maximum Allowable Emission Rates

Permit Number 43890 and PSDTX965

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (5)	TPY (4)
Hourly Allowables (6) for each of four GE 7FA Turbines and Duct Burners Stack 1, Stack 2, Stack 3 and Stack 4	DLN and SCR, Without HRSG Duct Burner Operation	NO _x	37.8	---
		CO	33.6	---
		VOC	3.2	---
		PM ₁₀	20.3	---
		SO ₂	4.5	---
		NH ₃	19.6	---
		NO _x (10)	235.00	---
		CO(10)	2000.00	---
Hourly Allowables (6) for each of four GE 7FA Turbines and Duct Burners Stack 1, Stack 2, Stack 3 and Stack 4	DLN and SCR, Each with Natural Gas-Fired 610 MMBtu/hr HRSG Duct Burners in Operation	NO _x	48.5	---
		CO	99.0	---
		VOC	16.4	---
		PM ₁₀	27.1	---
		SO ₂	6.0	---
		NH ₃	25.8	---
		NO _x (10)	235.00	---
		CO(10)	2000.00	---
Annual Allowables (6) for each of four GE 7FA Turbines and Duct Burners Stack 1, Stack 2, Stack 3 and Stack 4	DLN and SCR Technology, with Natural Gas-Fired 610 MMBtu/hr HRSG	NO _x (8)	---	166.5
		CO(8)	---	296.8
		VOC(8)	---	45.6
		PM ₁₀ (8)	---	105.4
		SO ₂ (8)	---	22.1

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (5)	TPY (4)
		NH ₃		95.8
COOL1	Cooling Tower 1	PM ₁₀	2.55	4.45
COOL2	Cooling Tower 2	PM ₁₀	2.55	4.45
COOL3	Cooling Tower 3	PM ₁₀	2.55	4.45
COOL4	Cooling Tower 4	PM ₁₀	2.55	4.45
AUXBOIL	Auxiliary Boiler	NO _x	6.98	15.69
		CO	6.51	14.65
		VOC	0.70	1.57
		PM ₁₀	0.49	1.11
		SO ₂	0.22	0.50
FWDTANK1	Fire Water Diesel Tank	VOC	0.02	0.01
COAGRID	Coagulant Aid Tank	VOC	0.12	0.01
TANKEDG	Emergency Diesel Tank	VOC	0.07	0.01
FWP	Fire Water Pump	NO _x	10.39	2.60
		CO	2.24	0.56
		VOC	0.84	0.21
		PM ₁₀	0.74	0.18
		SO ₂	0.69	0.17
EMGEN	Emergency Diesel Engine Generator	NO _x	12.40	3.10
		CO	2.67	0.67
		VOC	1.01	0.25
		PM ₁₀	0.88	0.22

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (5)	TPY (4)
		SO ₂	0.82	0.21
Fugitives A	Ammonia Handling	NH ₃	0.21	0.90
Fugitives B	Natural Gas Handling	VOC	0.23	1.02
MSSFUG	Miscellaneous Maintenance Activities	NO _x	<0.01	<0.01
		CO	<0.01	<0.01
		PM	1.04	0.39
		PM ₁₀	1.04	0.39
		PM _{2.5}	1.04	0.39
		VOC	5.59	2.23
		NH ₃	4.52	<0.01

Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:

71264	Oil Demister	VOC	0.0105	0.046
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- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO_x total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM total particulate matter, including PM₁₀ and PM_{2.5} as represented
- PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
- PM_{2.5} total particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- NH₃ - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Except for planned MSS activities, the concentration limits for the gas turbines listed in the permit conditions apply and may be a more stringent requirement than the mass emission rate limits listed in this table.
- (6) These emissions are permitted under PSD.
- (7) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, during any clock hour that includes one or more minutes of planned MSS activities, the pollutant's hourly emission limits that apply during planned MSS activities shall apply during that clock hour.

Emission Sources - Maximum Allowable Emission Rates

- (8) The tpy emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.
- (9) Unless otherwise stated, the lb/hr emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.
- (10) This short term emission rate applies during planned MSS activities.

Date: August 20, 2012